



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,911	07/15/2003	Donald McCoy	D-1171 R	8962
28995	7590	10/08/2008	EXAMINER	
RALPH E. JOCKE			TRAN, HAI	
walker & jocke LPA				
231 SOUTH BROADWAY			ART UNIT	PAPER NUMBER
MEDINA, OH 44256			3694	
MAIL DATE		DELIVERY MODE		
10/08/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/620,911

Applicant(s)

MCCOY ET AL.

Examiner

HAI TRAN

Art Unit

3694

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

1. This is the **Final Office Action** in response to the Amendment/Remarks filed on 9/29/2008, for application, titled: "Automated Banking Machine Bootable Media Authentication".
2. Claims 1-34 remain pending in this application and have been examined.

Priority

3. This application claims the benefit of U.S. Provisional Patent Application No. 60/396,607, filed 07/16/2002.

Response to Arguments

4. The Examiner has reviewed Applicant's Arguments/Remarks and Affidavits filed on September 29, 2008.
 - With respect to the premature argument, the Examiner agrees. Hence, the previous Final Office Action, dated July 31, 2008, is withdrawn.
 - With respect to the 37 C.F.R § 1.132 Affidavits, the argument is not persuasive. Hence, the 35 U.S.C. § 103 rejection remains stayed.
5. Applicant argues that the Harding and Watson references, alone or in combination, do not disclose to have a BIOS specify that one bootable drive to require an input of a password before booting, while a second bootable drive does not require an input of a BIOS password before booting (see Remarks, pages 3-4, last paragraph).

6. The Examiner disagrees. Harding discloses a system and method to automatically replace the primary BIOS if it fails the validation test with a backup BIOS to automatically boot the system without any intervention by an operator (see Harding, col. 1, lines 12-48). Harding also teaches switching between the primary BIOS and backup BIOS (see Harding, col. 2, lines 26-33. Examiner notes this is the same as "specify a default storage device drive to boot and requires the input of a BIOS password, and which storage device drive to boot without requiring the input of a BIOS password" of Applicant's invention – see Remarks, pages 2-3, paragraph 6). Harding is silent on BIOS boot password. However, Watson teaches a feature of securing access to a computer system with a password during the boot operation to determine whether the BIOS files are corrupted (see Watson, col. 4, lines 18-22 and Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Harding's invention, related to automatic replacement of corrupted BIOS, to include the secure access feature as taught by Watson to offer an improved and more secure computer system.
7. Harding in view of Watson is silent on ATM. However, it is old and well known in the art of banking and financial transaction. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Harding and Watson to the ATM system to provide an improved and more secure ATM system to customers.

8. In conclusion, the Examiner is satisfied that a combination of the Harding and Watson references discloses all the limitations as claimed. Hence, the 35 U.S.C. § 103 rejections remain stayed.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-34 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Harding et al. (U.S. Patent No. 6,651,188) ("Harding") in view of Watson (U.S. 5,475,839) ("Watson").

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

11. **Regarding claim 1**, Harding discloses a method comprising:

a) detecting with a computer of an automated banking machine for the presence of a bootable media in at least one alternative storage device drive of the automated banking machine, wherein a BIOS of the computer specifies which of a plurality of storage device drives corresponds to a default storage device drive which does not

require an input of a first BIOS password, and which of the plurality of storage device drives corresponds to the at least one alternative storage device drive which does require the input of the BIOS boot password (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22);

b) booting the computer responsive to a boot record on either the bootable media of the at least one alternative storage device drive or a bootable media of the default storage device drive (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22);

wherein when the bootable media of the at least one alternative storage device drive is detected in step (a), the booting of the computer includes requiring at least once for a user to input a password, wherein when the inputted password corresponds to the BIOS boot password stored in the BIOS of the computer, the computer is booted responsive to the boot record on the bootable media of the at least one alternative storage device drive (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22); and

wherein when the bootable media of the at least one alternative storage device drive is not detected in step (a), the computer is booted responsive to a boot record on the bootable media of the default storage device drive without requiring a user to input the BIOS boot password (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22).

12. Harding discloses a system and method which allows a backup BIOS image to automatically be enabled whenever the primary BIOS image is faulty without any

intervention by an operator (see col. 1, lines 38-40), but is silent on BIOS boot password. Watson teach a method and structure for securing access to a computer system including testing with a unique access diskette in conjunction with user ID, password for the security of the system (see Watson, col. 18-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the BIOS boot password feature of Watson with the teachings of Harding to provide a more secure computer system. Harding in view of Watson is silent on the ATM. However, ATM is old and well known in the art of financial transaction. It would have been obvious to one of ordinary skill in the art at the time of the invention to have applied the security feature to the ATM system to provide a more and better system to consumers.

13. **Regarding claim 2**, Harding teaches wherein when the bootable media of the at least one alternative storage device drive is detected in step (a) and the BIOS boot password is not inputted within a predetermined amount of time, in step (b) the computer is booted responsive to the boot record of the bootable media of the default storage device drive (see figure 2c/element 240).

14. **Regarding claim 3**, Harding teaches wherein when the bootable media of the at least one alternative storage device drive is detected in step (a) and at least once the inputted password does not correspond to the BIOS boot password stored in the BIOS of the computer, in step (b) the computer is booted responsive to the boot record of the bootable media of the default storage device drive (see Watson, col. 4, lines 18-22). One of ordinary skill in the art would have combined the teachings of Harding and Watson to offer a more and better secure ATM system to consumer.

15. **Regarding claim 4**, Harding teaches further comprising: c) executing at least one terminal control software component in the computer which is stored on the bootable media of the default storage device drive; and d) dispensing cash from a cash dispenser responsive to at least one terminal control software component (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22). Harding in view of Watson is silent on ATM for dispensing cash. One of ordinary skill in the art would have applied the teachings of Harding and Watson to an ATM system to provide a more secure system to consumers.

16. **Regarding claim 5**, Harding teaches further comprising:

c) receiving a first input that is representative of a request to run a BIOS setup program (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22); and

d) requiring a user to provide a second input that corresponds to the BIOS boot password stored in the BIOS prior to running the BIOS setup program (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22). One of ordinary skill in the art would have combined the teachings of Harding and Watson to offer a more and better secure ATM system to consumer.

17. **Regarding claim 6**, Harding teaches that further comprising: c) receiving a first input that is representative of a request to run a BIOS setup program; and d) requiring a user to provide a second input that corresponds to a BIOS program password stored in the BIOS prior to running the BIOS setup program (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22). One of ordinary skill in the art would have

combined the teachings of Harding and Watson to offer a more and better secure ATM system to consumer.

18. **Regarding claim 7**, Harding is silent on BIOS boot password. However, Watson teaches that both the BIOS boot password and the BIOS program password are stored in the BIOS of the computer (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22). One of ordinary skill in the art would have combined the teachings of Harding and Watson to offer a more and better secure ATM system to consumer.

19. **Regarding claim 8**, Harding teaches wherein in step (b) the default storage device drive and associated bootable media correspond to a hard drive (see Harding, col. 3, lines 13-5 of col. 4, figure 2A).

20. **Regarding claims 9-13**, Harding teaches wherein in step (b) the bootable media of the at least one alternative storage device drive corresponds to a portable media; wherein the portable media is a floppy disk, CD, DVD, and a portable hard drive (see Harding, col. 1, lines 12-25).

21. **Regarding claims 14-15**, these claims are the computer readable media claims for implementing the method claims 1-13. Hence, they have the same steps and limitations. Therefore, they are rejected under the rationale provided in claims 1-13.

22. **Regarding claim 16**, Harding disclose a method comprising:

a) detecting with a computer of an automated banking machine for the presence of a first bootable media in at least one first storage device drive of the automated banking machine (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22);

b) booting the computer responsive to a boot record on either the first bootable media of the at least one first storage device drive or a second bootable media of a second storage device drive of the automated banking machine (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22);

wherein when the first bootable media is detected in step (a), the booting of the computer includes: determining responsive to a BIOS of the automated banking machine that the at least one first storage device drive requires a BIOS boot password (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22);

requiring at least once for a user to input the BIOS boot password, wherein when an inputted password corresponds to a BIOS boot password stored in the BIOS of the computer, the computer is booted responsive to a first boot record on the first bootable media (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22); and

wherein when the first bootable media is not detected in step (a) the booting of the computer includes (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22):

determining responsive to a BIOS of the automated banking machine that the second storage device drive does not require the BIOS boot password, wherein the computer is booted responsive to the boot record on the second bootable media of the second storage device drive without requiring a user to

input the BIOS boot password (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22).

23. Harding discloses a system and method which allows a backup BIOS image to automatically be enabled whenever the primary BIOS image is faulty without any intervention by an operator (see col. 1, lines 38-40), but is silent on BIOS boot password. Watson teach a method and structure for securing access to a computer system including testing with a unique access diskette in conjunction with user ID, password for the security of the system (see Watson, col. 18-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the BIOS boot password feature of Watson with the teachings of Harding to provide a more secure computer system. Harding in view of Watson is silent on the ATM. However, ATM is old and well known in the art of financial transaction. It would have been obvious to one of ordinary skill in the art at the time of the invention to have applied the security feature to the ATM system to provide a more and better system to consumers.

24. **Regarding claims 17-18**, these claims are the computer readable media claims for implementing the method claim 16. Hence, they have the same steps and limitations. Therefore, they are rejected under the rationale provided in claim 16.

25. **Regarding claim 19**, Harding in view of Watson discloses a method comprising:
a) detecting with a computer of an automated banking machine that a bootable media is present in at least one alternative storage device drive of the automated banking machine, wherein a BIOS of the computer specifies that a BIOS password is required for the bootable media of the at least one alternative storage device drive; b) prompting

at least once for a user to input the BIOS boot password; c) determining that an inputted password corresponds to the BIOS boot password stored in the BIOS of the computer; d) booting software of the computer responsive to a first boot record on the bootable media of the at least one alternative storage device drive; e) restarting the computer; f) detecting with the computer that a bootable media is not present in the at least one alternative storage device drive; and g) booting the computer responsive to a boot record on a bootable media of a default storage device drive without requiring a user to input the BIOS boot password (see Harding, col. 3, lines 13-5 of col. 4, figure 2A; Watson, col. 4, lines 18-22).

26. Harding discloses a system and method which allows a backup BIOS image to automatically be enabled whenever the primary BIOS image is faulty without any intervention by an operator (see col. 1, lines 38-40), but is silent on BIOS boot password. Watson teach a method and structure for securing access to a computer system including testing with a unique access diskette in conjunction with user ID, password for the security of the system (see Watson, col. 18-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the BIOS boot password feature of Watson with the teachings of Harding to provide a more secure computer system. Harding in view of Watson is silent on the ATM. However, ATM is old and well known in the art of financial transaction. It would have been obvious to one of ordinary skill in the art at the time of the invention to have applied the security feature to the ATM system to provide a more and better system to consumers.

27. **Regarding claims 20-21**, these claims are the computer readable media claims for implementing the method claim 19. Hence, they have the same steps and limitations. Therefore, they are rejected under the rationale provided in claim 19.

28. **Regarding claims 22-34**, these are the machine claims that the instant application is used for. In this case, it refers to an automatic banking machine (ABM) or ATM. Harding in view of Watson is silent on the ATM. However, ATM is old and well known in the art of financial transaction. It would have been obvious to one of ordinary skill in the art at the time of the invention to have applied the security feature to the ATM system to provide a more and better system to consumers. Therefore, claims 22-34 are rejected under the same rationale provided in claims 1-21.

Conclusion

29. Claims 1-34 are rejected.

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

31. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAI TRAN whose telephone number is (571)272-7364. The examiner can normally be reached on M-F, 9-4 PM.

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. T./
Examiner, Art Unit 3694

Application/Control Number: 10/620,911

Page 14

Art Unit: 3694

/Mary Cheung/

Primary Examiner, Art Unit 3694